

Title: Heat Transfer

Introduction: Heat travels in waves that move and change from one form to another. There are three ways that heat can move: radiation, conduction and convection. In this activity you will use materials provided to demonstrate each form of heat and you'll show how heat can transfer from one form to another.

Materials: light source, beakers, heat source, hot plate, water, food color (ask teacher), metal tweezers/tongs, wax or crayons, thermometers, bunsen burners, copper sheets, metal spoon, candles, aluminum foil, pie pans,

Procedures:

1. Talk in your group about how you will use the materials to demonstrate radiation, conduction and convection.
2. Use your materials and make sure you can show each type. Call your teacher over to look at your work. Some students can show all 3 forms of heat transfer in one lab set-up or apparatus.

Teacher initials _____

3. Devise a way to show how heat can transfer from one form to another. All three forms must be shown. Draw your set-up and label the energy forms.

Problem:

Research:

Drawing of set up of experiment:
(Label radiation, convection and conduction)

Hypothesis: If...then...because

Procedures: Step-by step

Analysis Data:

Fill out this chart for energy transfer:

	Radiation	Conduction	Convection
Definition			
How you demonstrated			
What medium did it travel in?			
An example from real life			
Important because			

Conclusion: The data shows...